



Mr. Eric Winiecki  
EPA Project Coordinator  
U.S. Environmental Protection Agency, Region 10  
1200 Sixth Avenue, Suite 900  
Seattle, WA 9810

Subject:  
Response to EPA Comments  
Residential Well Sampling Quality Assurance Project Plan  
Docket No. SDWA-10-2013-0080, Yakima Valley Dairies

Dear Mr. Winiecki:

ARCADIS U.S., Inc. (ARCADIS) on behalf of: (1) Cow Palace, LLC; (2) D & A Dairy, LLC (also known as D&A Dairy L.L.C.), George DeRuyter & Son Dairy, L.L.C., and George & Margaret, L.L.C; and (3) Liberty Dairy LLC and its associated dairy facility H&S Bosma Dairy, collectively the "Yakima Valley Dairies" (the "Dairies") present our responses to the U.S. Environmental Protection Agency (EPA) Region 10 letter "Comments Regarding Quality Assurance Project Plan, Residential Well Sampling; Administrative Order on Consent ("Consent Order"); Docket No. SDWA-10-2013-0080; Yakima Valley Dairies, Washington", dated April 12, 2013.

**EPA Comment 1:** Signature pages.

- a. Remove the signature lines for EPA personnel. EPA approval of documents will be via letter.
- b. The italicized notice is inconsistent with the requirements of the Consent Order and must be deleted.

**ARCADIS Response 1:**

- a. Signature lines for EPA personnel have been removed.
- b. The italicized notice has been deleted.

**EPA Comment 2:** Table of Contents. Consolidate the multiple sections entitled "Certification" into a single section.

Imagine the result

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ENVIRONMENT

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April 26, 2013

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**ARCADIS Response 2:** The multiple sections entitled “Certification” have been consolidated into one section (Section 6).

**EPA Comment 3:** Distribution List. The page number should be Roman numeral “v” to be consistent with the preceding pages.

**ARCADIS Response 3:** The page number for the Distribution List has been renumbered to “v”.

**EPA Comment 4:** Multiple sections. Remove “EPA” from the parenthetical phrases so that they read “(Group A)”, “(Group B)”, etc.

**ARCADIS Response 4:** “EPA” has been removed from the parenthetical phrases in multiple sections. These phrases now read “(Group A)”, “(Group B)”, etc.

**EPA Comment 5:** Page 1, Section 1.1 – Project/Task Organization. Add contact information (name, address, phone number, etc.) for the subcontracted laboratory that will analyze project samples, and list the laboratory’s responsibilities.

**ARCADIS Response 5:** Laboratory contact information (name, address, phone number, etc.) has been added to Section 1.1 Specific laboratory responsibilities are presented in Section 3.2.

**EPA Comment 6:** Page 4, Section 1.3.2 – Project Schedule. The schedule does not specify when the reverse osmosis (“RO”) treatment systems need to be installed. According to the Consent Order (see Consent Order Statement of Work Attachment 1 – Schedule of Tasks, line 10), RO treatment systems must be provided within 30 days of submittal of validated analytical data to EPA. The language in the Residential Well QAPP only refers to the offer of a RO treatment system for wells with nitrate concentrations exceeding the MCL. Clarify this task as follows: “Offer of RO system or alternative water to residences with nitrate concentration greater than 10 mg/L, and provision of RO system or alternate water if offer is accepted.” Also, revise the start date because this task starts and ends on the same day.

**ARCADIS Response 6:** The project schedule table in Section 1.3.2 has been revised accordingly.

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**EPA Comment 7:** Page 5, Section 1.4.2 – Measurement Performance Criteria. Include a reference to Table 3 which identifies project acceptance criteria/goals; specifically, precision, accuracy, and completeness.

**ARCADIS Response 7:** Table 3 has been renumbered to Table 2. Project acceptance criteria/goals; specifically, precision, accuracy, and completeness in Table 2 is now referenced.

**EPA Comment 8:** Page 7, Section 2.1.1 – Residence Identification and Communication.

- a. Move the information in Table 2 to an appendix. (Note: Renumber Table 3 to Table 2).
- b. Specify that the field team will include personnel capable of communicating to residents in Spanish, or that such personnel will be available by telephone.

**ARCADIS Response 8:**

- a. The information in Table 2 has been moved to the appendices. Table 3 has been renumbered to Table 2.
- b. The field teams will include personnel capable of communicating to residents in Spanish, or that such personnel will be available by telephone.

**EPA Comment 9:** Page 9, Section 2.2 – Sampling Methods. Include a provision to use GPS to measure and record the location of each well sampled.

**ARCADIS Response 9:** The following provision has been added:

“The GPS coordinates of the location for each well sampled will be measured and recorded. GPS data will include latitude, longitude, and elevation. Coordinates will be recorded in decimal degrees.”

**EPA Comment 10:** Page 10, Section 2.3 – Sample Handling and Custody. Provide contact information (i.e., name of person receiving samples, address of laboratory, and phone number) for the laboratory that will be used for this project. State the frequency that samples will be shipped to the laboratory, especially considering the short holding time for nitrate analysis. Time between sample collection and analysis

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must be clearly stated in the QAPP and must state that the holding time for the sample will be met. Include this information in the text.

**ARCADIS Response 10:** Contact information (i.e., name of person receiving samples, address of laboratory, and phone number) for the laboratory that will be used for this project has been included in Section 2.3. In addition, the following text has been added:

“Because of the 48-hour holding time for nitrate analysis by EPA method 300.0, samples will be shipped using an overnight delivery service each day (Monday through Thursday). TestAmerica will analyze the samples immediately upon receipt to ensure holding time compliance.”

**EPA Comment 11:** Page 12, Section 2.5.2 – Sample Labeling Methodology. This section suggests that trip blanks will also be collected even though these are not identified in the Field Quality Control Section (Section 2.5.1). We suspect that the reference in Section 2.5.2 to trips [sic] blanks should be field blanks. Correct the error.

**ARCADIS Response 11:** “Trip blanks” have been revised to “field blanks”.

**EPA Comment 12:** Page 14, Section 2.10 – Data Management.

- a. This section must state that data provided to EPA will be in accordance with the enclosed documents entitled “EPA Region 10 Monitoring and Analytical Data Deliverables Data Submission Process for WQX Compatible Deliverables for Yakima Dairies (Docket No. SDWA-10-2013-0080),” and “EPA Region 10 Geographic Information Systems Data Deliverable Guidance for Yakima Dairies (Docket No. SDWA-10-2013-0080).” Include these documents as separate appendices in the QAPP.
- b. Enclosed is a file (R10WQXEDD.zip) that includes instructions, naming conventions, format requirements and templates for electronic data deliverables so they will be compatible with EPA’s Water Quality Exchange (WQX) database. Include a reference to this file in the Residential Well QAPP. Data submitted to EPA must be provided in a format consistent with the instructions contained in this file recognizing that the attached templates are comprehensive and not all elements or instructions apply to the residential well sampling activity.

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**ARCADIS Response 12:**

- a. Section 2.10 has been revised accordingly. The referenced documents are included in the appendices.
- b. Section 2.10 includes a reference to EPA file R10WQXEDD.zip.

**EPA Comment 13:** Page 15, Section 3.2 – Reports to Management.

- a. The text must be revised to state that the validated data, the data validation report, and the associated raw laboratory data will be submitted to EPA in accordance with the AOC.
- b. Include a list and description of the documentation expected from the analytical laboratory conducting analyses for this project. At a minimum, the laboratory must submit sufficient laboratory documentation such that the sample results are traceable to the field samples, and that the analytical data can be verified and validated by an independent third party reviewer.

**ARCADIS Response 13:**

- a. Section 3.2 has been revised accordingly.
- b. Section 3.2 includes a list and description of the documentation expected from the analytical laboratory conducting analyses for this project to the extent of meeting the requirements of documenting that sample results are traceable to the field samples, and that the analytical data can be verified and validated by an independent third party reviewer.

**EPA Comment 14:** Page 15, Section 4 – Data Validation and Usability.

- a. Include an explanation of how all field notes, forms, and chains of custody will be reviewed for accuracy and completeness. Identify the individual who will perform this task.
- b. The term “validation” refers to a level of review that is outside of the analytical laboratory (i.e., third party and independent). Therefore, the language in this section must be revised to show that the laboratory will verify all of their own work, but that the project chemist will conduct the data validation.

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- c. Identify the standard operating procedures (“SOPs”), guidance documents, checklists and other documentation that the project chemist will use to validate the data.

**ARCADIS Response 14:**

- a. Section 4.2 has been revised to include how all field notes, forms, and chains of custody will be reviewed for accuracy and completeness. Further, this section identifies the individual who will perform this task (i.e., project chemist).
- b. Section 4.2.1 has been revised as follows: “An ARCADIS chemist will validate laboratory data upon receipt. The chemist will perform a Level II validation consistent with the National Functional Guidelines (EPA 2010). The following checklist will be used in the validation process.”
- c. Section 4 includes references to standard operating procedures (“SOPs”), guidance documents, checklists and other documentation that the project chemist will use to validate the data.

**EPA Comment 15:** Appendix A. Remove the site Health and Safety Plan in Appendix A from the QAPP and submit it as a separate document. EPA does not approve Health and Safety Plans.

**ARCADIS Response 15:** The site Health and Safety Plan in Appendix A has been removed and will be submitted as a separate document.

**EPA Comment 16:** Appendix E.

- a. The letter indicates that Arcadis will be in the area “Monday through Friday, between the hours of 8 am and 5 pm.” These hours may not work for some residents. Revise the letter to provide an opportunity for people to call if they would like to schedule a more definite time window for the sampling. For example, the “sorry we missed you” notices sufficiently inform residents that they can schedule a time that is convenient for the resident.
- b. Revise the Spanish version as follows:
  - Revise “el pozo se encuentra los limites de las pruebas” to something like “el pozo se encuentra dentro de los limites del area par alas pruebas.”

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- Revise “se recogieran y se envian a un laboratorio” to “se recogeran y se enviaran a un laboratorio”
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**ARCADIS Response 16:**

- a. The letter has been revised as follows: “We will be visiting residences Sunday through Thursday, between the hours of 8 am and 8 pm.”
- b. The Spanish version of the letter has been revised as follows:
  - **“y está ubicado dentro de los límites del área de nuestro”**
  - “será recogida y enviada a un laboratorio”
  - Additional changes to the Spanish version were necessary to be consistent and grammatically correct with changes to the English version.

If you have any questions, or require further information, please contact myself or Steve Hicks at 509.928.3369.

Sincerely,

ARCADIS U.S., Inc.



Kevin M. Freeman, PG  
YVD Project Coordinator

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